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the **ILLINOIS ENGINEER**



Read, "The Professional Engineer's Answer to Unionization"



70th BOARD OF DIRECTION, I. S. P. E.
(See page 1)

★ ★ ★
THE ILLINOIS ENGINEER, MAY, 1954—VOLUME XXX, NO. 5

Address all communications to the Society at 631 East Green St., Champaign, Illinois.
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ILLINOIS ENGINEER: W. A. OLIVER, Editor-in-Chief; H. E. BABBITT, Associate Editor

Of Professional Interest

THE ILLINOIS ENGINEER—THIS MONTH

Union Versus Profession

In this issue we are printing a paper on unionization by T. Carr Forrest, President, N.S.P.E. This problem of the unionization of engineering employees has been becoming more and more acute during the past two or three years. This is particularly true as a result of the activities of the Engineers and Scientists of America, (E.S.A.). During recent months certain affiliates of the A.F.L. have also been active in this direction.

Assuming that we accept as axiomatic the statement that unionism and the professional attitude are incompatible, what have the technical and professional engineering societies been doing to counteract these efforts? As far as one can observe, not much more than give moral support to the young men who are facing the decision, to join or not to join. Moral support is important. A large share of the professional man's reward does come from the knowledge of a job well done, from the satisfaction of creative accomplishment. But to the young engineer with increasing family responsibilities, regardless of ideals, ten dollars more per week right now is going to appear to be a lot more important than the anticipated satisfaction of some future accomplishment.

And so, something more than moral support, as important as that may be, must be offered to the young engineer to help him decide to say "No," to the unions. One obvious thing of course would be to convince employers to raise salaries to a point where union membership would not be a temptation. It would seem that this shouldn't be too hard to accomplish if the employer can be made to realize that if he doesn't do it without unionization, he will do it with.

The problem is a serious one and has taken on aspects which at the moment are almost frightening. If it existed, here is a situation where a unified profession acting in concert could really swing a big stick. In any case, it is to be hoped that a satisfactory solution can be found and quickly. Read Mr. Forrest's paper.

W. A. OLIVER, Editor

COST OF LIVING INDEX

The cost of living correction factor to be applied to the I. S. P. E. Schedule of Minimum Fees and Salaries was 192.3 for February, 1954. This factor is based upon a 1935-39 average taken as 100.

At the present time the Bureau of Labor Statistics is basing its Consumer Price Index upon a 1947-49 average. The figure of 192.3 given above has been converted from this average. This would seem to be the logical method of presentation until the Society publishes a new Fees and Salaries Schedule established upon the 1947-49 base.

If you cannot win, make the one ahead break the previous record.

—Keene Thrusts.

COVER PICTURE

70th Board of Direction

The picture on the cover of this month's issue of the ILLINOIS ENGINEER is of the new Board of Direction which held its first meeting in East St. Louis on March 27th, last.

Pictured left to right, bottom row: P. E. Roberts, Executive Secretary; R. G. Brichler, Past President; A. Douglas Spicer, Secretary-Treasurer; C. W. Klassen, President; Dwain Wallace, Vice-President; George DeMent, National Director; Lee I. Osborn, National Director; M. E. Amstutz; Lake (for Kramer).

Left to right, second row: Leslie Ryburn, Capital; Douglas Dreier, DuKane; Royce Johnson, Rockford; Louis Pappmeier, West Central; W. E. Gronberg, Rock River; Karl Brugger, Peoriarea; L. J. Keenan, St. Clair.

Left to right, third row: Harold Sommerschild, Chicago (for Dolio); J. R. Gardner, Central Illinois; B. P. Johnson, Ambraw; G. R. Thatcher, Madison; W. K. Waltz, Joliet (for Gray); Frank L. Dunavan, Illinois Valley; William D. Mitchel, Champaign County.

V. E. GUNLOCK NEW VICE-PRESIDENT OF N. S. P. E.

Clarence T. Shoch of Allentown, Pennsylvania, has been elected to the presidency of the National Society of Professional Engineers for the 1954-55 administrative term, according to an announcement from Washington headquarters. Mr. Shoch, a well-known electrical engineer and a graduate of the Drexel Institute of Technology, is assistant to the vice-president of the Commercial Department, Pennsylvania Power and Light Company. He will succeed T. Carr Forrest, Jr., consulting engineer of the firm of Forrest and Cotton, Dallas, Texas, when he is installed as N. S. P. E. president during the Society's annual meeting in Milwaukee, Wisconsin, June 9-12.

In addition to Mr. Shoch, the following engineers were elected vice-presidents for the various areas covered by

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READ THE ADVERTISEMENTS

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the National Society: Louis F. Frazza, staff manager, Transite Pressure, Irrigation and Sewer Pipe, Transite Pipe Department, Division Headquarters, Johns-Manville Sales Corporation, Hawthorne, New Jersey—vice-president, Northeastern Area; M. F. Wooten, Jr., Wooten, Wooten and Crosby, Consulting Engineers and Architects, Charlotte, North Carolina—vice-president, Southeastern Area; Virgil E. Gunlock, Commissioner of Public Works, City of Chicago, Illinois—vice-president, Central Area; John B. Jardine, president, Concrete Sectional Culvert Company, and vice-president and general manager, Jardine Bridge Company, Inc., Fargo, North Dakota, vice-president, North Central Area; Robert J. Rhinehart, division superintendent, Arkansas Power and Light Company, Pine Bluff, Arkansas—vice-president, Southwestern Area; Orland C. Mayer, director of industrial development in charge of engineering work, Idaho Power Company, Boise, Idaho—vice-president, Western Area; Russell B. Allen of College Park, Maryland, professor of civil engineering at the University of Maryland, was also elected to a seventh term as treasurer of the Society.

HARRY SCHLENZ NEW PRESIDENT OF PACIFIC FLUSH TANK CO.

At a meeting of the Board of Directors of the Pacific Flush Tank Company on April 14, 1954, the following officers were named:

Harry E. Schlenz—President, member I. S. P. E.
Lawrence E. Langdon—Vice-President and Sales Manager, member I. S. P. E.
Clifford S. Cox—Secretary.
Dorothy M. Burwell—Treasurer.
Newton C. Turcot—Controller.

Lester E. Rein, who has been associated with the Company since 1901, nine years after its organization, and has served as President since 1934, was elected to the newly constituted office of Chairman of the Board.

Harry E. Schlenz has been active in sales promotional work with the Company since 1930, served as Secretary from 1934 to 1936, and as Vice-President and Sales Manager since 1936.

Lawrence E. Langdon has served the Company since 1932 as Chief Engineer and later in sales promotion, and was Secretary from 1936 to 1948, and Treasurer since 1948.

Clifford S. Cox has been with the Company since 1933, serving in the capacity as Chief Engineer and later Customer Relations activities, and has been Secretary of the Company since 1948.

Dorothy M. Burwell returns to the office of Treasurer, which was previously held by her from 1936 to 1948.

Newton C. Turcot has been with the Company since 1947 and has been Controller since 1951.

The Pacific Flush Tank Company has been engaged in the manufacture and promotion of Waste Treatment Equipment exclusively since 1892.

Willis D. P. Warren

The Illinois Society of Professional Engineers reports with sorrow the death of its long-time friend and member, Mr. Willis D. P. Warren. The following is from the pages of the *Decatur Review*, April 13, 1954:

Mr. Warren, 71, who headed the engineering firm of Warren & Van Praag Inc., from 1918 until his retirement in January, 1952, died at 6:30 a. m. today in his home at 145 N. Haworth Ave.

Mr. Warren, a native of Bazaar, Kan., and a graduate of the University of Texas, was widely known as a practicing engineer and as an authority in the field of municipal public works.

Mr. Warren announced at the time of his retirement that he would devote his full time to writing books. In addition to five technical publications on engineering problems, he also wrote "Mid-Century Appraisal of Civilization," in which he described what he saw as the gradual deterioration of society.

He gave Christianity as the all-time answer: "An intensive study of history reveals the significant fact that civilizations rise and fall but that Christianity is . . . an ever-growing and ever-expanding force for good . . ."

In 1952 Mr. and Mrs. Warren gave \$3,500 to Millikin University for the establishment of a Christian Leadership scholarship at the school.

Mr. Warren was born Dec. 19, 1882, and moved to Texas in 1892. He was graduated from the University of Texas in 1906 and after working in the Southwest, moved to Decatur in 1913, coming here from Carlinville.

In 1918 he and his associate, F. D. Holbrook, advocated a plan for impounding water in Long Creek, instead of building the city's dam on the Sangamon.

During World War I he was a first lieutenant in the Corps of Engineers, and during World War II he was an architect-engineer for the War Department.

In the latter post, he had charge of design and supervised construction of the water supply, sewage and electric facilities at Camp Ellis.

In 1933 he was named a member of the state civil works engineering board, and in 1934 he was named assistant chief engineer of Civil Works Administration work in Illinois.

His firm supervised construction of the city's big north side sewer project in 1926.

He was a member and past president of the Illinois Society of Professional Engineers, past president and life member of the Central Illinois section of the American Society of Civil Engineers, a member of the American Water Works Association, and a member of the National Society of Professional Engineers.

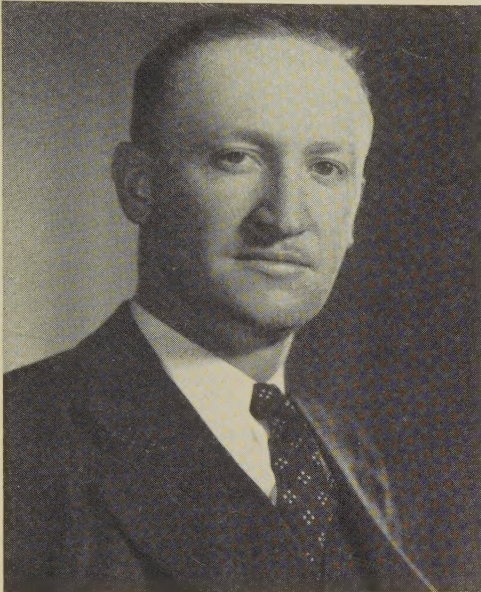
He was a member of the First Presbyterian Church, and an elder there.

APPOINTED COUNTY SUPERINTENDENT OF HIGHWAYS

Devereux H. Murphy of 221 South Missouri Avenue, Belleville, Illinois, has been appointed for a six-year term as the County Superintendent of Highways of St. Clair County. He has been serving as acting county superintendent since December 15 when Ralph R. Bartelsmeyer left the position to assume the post of Chief Highway

Engineer with the Illinois Division of Highways. Murphy was the assistant maintenance engineer of the French Village district of the state highway department before becoming acting county superintendent.

He was educated in Springfield grade and high schools—graduated from the University of Illinois College of Engineering with honors in 1930. He is a member of Tau Beta Pi, National Honorary Engineering Fraternity; Chi Epsilon, National Honorary Civil Engineering Fraternity; Mu San, Municipal and Sanitary Engineering Fraternity; and Theta Tau, Professional Engineering Fraternity.



D. H. Murphy

He is a Registered Illinois Land Surveyor, Registered Professional Engineer, Member of I. S. P. E., Member of Illinois Association of Highway Engineers, past Member of Illinois Engineering Council, Past President of East St. Louis Chapter of Illinois Association of Highway Engineers and member of Belleville Lodge of B. P. O. E. He takes an active part in the affairs of the St. Clair Chapter.

OPINION NO. 2—COMMITTEE ON ETHICS AND PRACTICE, ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS

(Printed for Permanent Record Upon Recommendation of Board of Direction)

EMPLOYMENT—Acceptance of, irrespective of contract with other Engineer.

An Engineer may properly accept employment relative to an engineering project which has previously been handled by another engineer, provided that the other engineer has been given notice by the client that his employment has been terminated.

An instance was referred to the committee wherein an Owner notified a consulting engineering firm under contract for professional services that they were cancelling the contract. The Owner then proceeded to solicit proposals for the engineering work from other consultants. The firm whose contract had been cancelled

took the stand that it would be unethical for any other engineers to accept employment from the Owner until both parties to the contract agreed to the contract termination.

The following is quoted from Opinion 10 (July 13, 1926) of the Committee on Professional Ethics and Grievances of the American Bar Association (American Bar Association, 1140 N. Dearborn St., Chicago 10, Illinois):

"A lawyer may properly accept employment to handle a matter which has been previously handled by another lawyer, provided that the other lawyer has been given notice by the client that his employment has been terminated. The lawyer originally engaged has his remedy at law for any breach of contract that may occur through the client's termination of his employment but he cannot insist that his professional brethren refuse employment in the matter merely because he claims such a breach of contract. To hold otherwise would be to deny a litigant's right to be represented at all times by counsel of his own selection."

It is believed that the statements made by the Bar Association Committee apply as well to employment of engineers as they do to employment of lawyers in similar instances.

It would not be proper for an engineer to impede the progress of a project by refusing to relinquish his interests in a professional engagement after the client notified him of his intentions to cancel the contract. In case of breach of provisions of the contract, he would have recourse to the courts.

It would, of course, be improper for an engineer to attempt to secure employment for work handled by another engineer when an agreement, either written or oral, was in effect and no notice of cancellation had been given.

The committee's opinion was stated by L. K. Crawford; R. T. Cash, L. D. Hudson, J. R. Gardner, C. A. Koerner, W. T. Hooper, concurring.

FROM CENTRAL ILLINOIS CHAPTER, "WHISPERS"

JERRY HAMMOND, Editor

Juvenal, the Roman poet, once said, "All wish to possess knowledge, but few, comparatively speaking, are willing to pay the price." This basic fact has not changed, even during our busy age. Today, much knowledge is required from every Professional Engineer. Therefore, much knowledge must be acquired to satisfy this demand. Your Program Committee makes every effort to provide varied and interesting programs for your benefit. The second move, however, is yours and that is to attend all meetings regularly to enjoy these benefits. Besides adding to your store of knowledge, you are contributing to the fellowship with your professional brethren. If you have not attended meetings regularly in the past, try it; it will be time well invested.

Congratulations to Parke Boyer for his new twin sons and Jerry Hammond for his new son. The loss of Mr. W. D. P. Warren, who passed away this past week, will be deeply felt by the engineering profession. We express our sincere condolences to Mrs. Warren.

The New Administration



State officers for '54-'55. Left to right: Past President Brichler, Secretary Spicer, President Klassen, Vice-President Wallace, National Directors DeMent and Osborn.

J. R. GARDNER ON UNITY

Engineering News-Record, Mar. 4, 1954

SIR: This letter concerns the editorial "Less Unity for Engineers" in ENR Dec. 10, p. 172.

The National Society of Professional Engineers, and particularly the state member organization such as the Illinois Society of Professional Engineers, attempts to be a grass-roots organization, insofar as is practicable. It is impracticable for any organization to be entirely a grass-roots organization, whereby every matter that comes before the organization as to policy is referred to the membership for decision. Such an organization would get nowhere. However, from my observation, I. S. P. E. and N. S. P. E. refer matters of important policy to the membership for decision. The matter of the four plans of unity in the profession was discussed at the local level and a vote taken concerning the plan to recommend.

You say the membership of N. S. P. E. were not given a chance to decide on the Engineers Joint Council plan. It seems to me that this would have been a useless gesture. N. S. P. E. voted overwhelmingly for Plan D, which was not the plan proposed by E. J. C. Do you believe that N. S. P. E. membership would have selected one plan when they were so strong for some other plan?

How many members of A. S. C. E., A. S. M. E., A. I. E. E. and the other members of E. J. C. were given a chance to vote on which plan of unity they preferred? So far as I know, a mere handful of the upper hierarchy. This upper hierarchy did not want the membership to decide, because it might not be according to their pet plan.

You say that there are 150,000 engineers who belong to E. J. C. and 30,000 who belong to N. S. P. E. I do not believe the ratio is this much actually due to duplication, foreign membership, etc. But suppose for talking purposes it is 130,000, how many were given their choice of the unity plan? Probably some number less than 200. Undoubtedly there are many of the members of E. J. C. who favor the joint plan, but there are probably many who do not. As yet there is no way of telling how many fall in each column. As a result, it appears that there is no clear-cut decision, based on the choice of all the engineers belonging to all the organizations. If there were such a decision, I should be more willing to abide by it.

J. R. GARDNER,
Consulting Engineer,
Decatur, Ill.

DE LEUW, CATHER & COMPANY, ENGINEERS, OF CHICAGO

take pleasure in announcing the organization of De Leuw, Cather & Company of Canada, Limited and that H. William Tate, formerly assistant general manager, Toronto Transit Commission, has joined their organization and will be executive vice-president with offices at 52 St. Clair Avenue East, Toronto 7, Canada, March 31, 1954.

On the timberline of the mountain, where the storms beat in full fury, we find the sturdiest trees, the hearty veterans of ten thousand blasts. In the hothouse is produced the puny plant that fades in a day. Adversity is hard to bear, but it tries the soul and strengthens it.

—Author Unknown.

The Professional Engineer's Answer to Unionization

T. CARR FORREST, JR., President

National Society of Professional Engineers

(Presented at Annual Meeting, East St. Louis, March 26, 1954)

A number of statements have already been made on the Professional Engineer's Answer to Unionization. Some of these have followed periods of prolonged debate, while others reflect the basic thinking of individuals who have given and are giving much of themselves, as well as their time and resources, towards the advancement of the Engineering Profession.

There is not a better beginning than to quote the adopted policy of your National Society of Professional Engineers. It is as follows:

"1. It is definitely unprofessional for a professional engineer, professionally employed, VOLUNTARILY to join a heterogeneous labor union, dominated by, or obligated to, nonprofessional groups. As stated by the Society, through its Board of Directors at Oklahoma City in September 1948, 'The individual responsibility and independent judgment required of a Professional Engineer are incompatible with the regimentation fundamentally inherent in unionization.'

"Nothing in this statement of principle shall be construed as a criticism of engineers who may be forced to join a labor union, against their will, but engineers in this predicament should seek to extricate themselves by due process of law.

"Nothing in this statement of principle shall be construed as a criticism of engineers-in-training, who voluntarily join a labor union when, as a step in their practical engineering training, they are temporarily employed in nonprofessional or subprofessional work, where their fellow workers are organized. When promoted to professional responsibilities, however, the engineer cannot continue his labor union affiliations without sacrifice of professional status."

Now this policy was developed only after a searching study of a committee and the democratic process that is followed by your National Board of Directors in open debate and voting. It was first adopted in 1948.

It is significant that after a reopening of the subject and after following the same Committee-Board process, the 1948 policy was reiterated in November 1952. During this four-year span, the personnel of the Board had undergone material changes, and yet the identical language of the 1948 policy was used in the adopted 1952 policy. I cannot help but be impressed with the implied emphasis of the latter action.

Those of you who have not already done so, should refer to the April 1953 issue of the American Engineer, and particularly to an article by the President of the American Society for Engineering Education. The subject of Dean W. R. Woolrich's article is "The Professional Engineer—Ascending to New Heights or Leveling Off to Mediocrity." Unlike many articles, it is well documented before Dean Woolrich sums up his own philosophy. I merely want to give you today one of the docu-

mented statements and a portion of the author's views on this subject. The statement is as follows:

"The previous surveys of the National Society's Committee prepared in May, 1946, indicated that as of that date less than five per cent of the engineers questioned favored a certified union. Those who opposed the union of engineers did so usually on the basis that by unionizing:

- "1. Individual initiative would be restricted.
- "2. Individuals would be regimented by the union organization.
- "3. A 'typing' of engineering positions and a 'leveling' of salaries would result.
- "4. Professional status and prestige of engineers would be damaged if not lost entirely.
- "5. Individual advancement and recognition of individual achievements would be stifled."

An extract from Dean Woolrich's views on this subject reads as follows:

"The future of engineering as a profession in North America depends upon the ability of the engineering colleges to advance their education to new levels of professional achievement. The incentive for both students of engineering and engineering colleges, however, is in the hands of those who direct the progress of the graduates after they leave the college halls.

"The answer to either the students of the engineering colleges or to the man who plans to grow is not unionism. The reward for which the professional engineer strives is a composite of full recognition and appreciation for the manpower product of the engineering colleges by those who employ, advise and direct. The compensation should be commensurate with the abilities and contributions of each individual of the profession. It is essential that the salaries for men of accomplishment and years of service shall be an incentive to the men entering the profession."

You will observe that he rightly places responsibility not only with the educational institutions in the first phase of indoctrination but, equally important, with the members of the engineering profession in the second phase.

I cannot help but be profoundly impressed with any remarks made by Dean Woolrich. He is a man who has devoted his life to the advancement of the engineering profession, along the highways of teaching, writing and research.

There are those, however, who do not agree with Dean Woolrich that unionism for professional people will result in the loss of individual initiative and the standardization of professional work. This opposing point of view is expressed in a communication from the vice-president of Engineers and Scientists of America, which as you know, is a federation of engineering and scientists unions, published in the June 1953 issue of the American

Engineer. There the statement is made, and I quote: "The only practicable approach for engineers to employ is the one that has worked so successfully for the trades and shop employees—that is collective bargaining. Collective bargaining can be used not only to achieve economic advancement, but also professional advancement."

Let us admit that this is a sincere viewpoint, held by some professional engineers of the highest professional integrity. Only time will provide us with the "answer" to these opposing concepts, but it seems clear to me that while the collective technique may be the most immediate and direct way for the industrially-employed professional engineers to get more money by the use of "pressure" tactics, which is the admitted and accepted strength of unions, it cannot at the same time but result in a loss of professional development and standing in the eyes of the public.

I would refer you to several unrelated illustrations of this point. First, in a large Eastern newspaper of recent date there appeared the headline, "RCA Engineers Announce Strike." In the same newspaper, the next day, "RCA Engineers Call Off Strike." Here was a case where a union of professional people (and the word "professional" is in the title of the union name) called upon their weapon of last resort to force their point of view. Regardless of the particular issues in that situation, can professional people go before the public one day in terms of strikes and picket lines, such as are used by production workers, and go before the public another day—as we do during Engineers' Week and upon other occasions—talking of public service and ask the public to bestow their blessing and recognition on us as a professional body entitled to that public distinction because of our endeavors to obtain advanced knowledge for the public good as well as our own good?

Fortunately, there has been little activity of this kind by professional engineers, but it has occurred and it will occur again if the union philosophy spreads among engineers or other professional groups. It is certainly well known that the final weapon of unionism is the "strike," and all that term implies, and I venture to say that if the doctrine and strength of unionism expands, the union groups will increasingly find the necessity of such tactics to satisfy the economic appetites of their members.

Another reference I have in mind is a collective bargaining agreement between one of the largest employers of engineers in the nation and one of the largest engineering unions. Time does not permit a complete evaluation and comment on this 58-page document, but I invite your attention to the wide scope of subjects affecting each and every individual engineer for whom the agreement was negotiated, and which controls his professional, as well as economic status. The list of subjects goes from standard work schedules to vacations, from general adjustment in rates of pay to layoff allowances, from occupational classifications to professional standards, and so on and so on for a total of 35 separate subjects. One of the obvious hallmarks of professionalism is individualism

and the right to make one's own way in improvement in the economic ladder, and certainly, at least in the professional ladder. This agreement may be to the economic advantage of the engineers for whom it was negotiated, but I maintain that when an individual professional engineer is "represented" by force of law and collective bargaining agreement to the extent of almost every phase, detail and aspect of his daily professional activities, it cannot be successfully maintained that collective bargaining is compatible with his status as a professional man. If your professional development and advancement are to be regulated in 35 ways as part of your daily activities, you may or may not climb the professional ladder, but you will climb it, if at all, only on the rungs which are contained in the "agreement" and you will climb it no faster than the "agreement" permits.

Now, I have been making comments along this general line during the past months in my trips about the country and perhaps sometimes it might have appeared that I had overplayed two particular incidents, the pattern of which would not be repeated in the future. Unfortunately, this is not the case. Most of you have probably seen some of the extensive newspaper and magazine publicity of the past few weeks on the strike of engineers at the Sperry Gyroscope Company in New York. According to the *New York Times* of March 3, 1954, the Engineers Association, a part of ESA, walked out and established a picket line after negotiations on salary increases had collapsed. I quote from the newspaper story: "The strike will cripple defense production in one of the nation's largest concerns for manufacturing electronic and precision instruments." Further stories continued in subsequent days on the status of the strike. It was concluded on March 14, 1954, when the striking engineers accepted the company offer of an increase which was reported as being exactly that offered by the company before the strike started.

On March 11, 1954, the engineers' union published a quarter-page ad in the *New York Times*, headed in bold type, "The Sperry Engineers Are on Strike." The ad told the public the reasons for the strike from the union's viewpoint and contained the statement, among others, "We want improved professional status and extension of professional privileges to all of our engineers."

We don't have to know who was right or who was wrong on the strike issues or express any judgment on the company or the engineers in the union to know one obvious fact: if this is the only way for professional engineers to improve their economic and professional status then we can forget about our dream of being fully accepted as members of an honorable and learned profession. Can anyone seriously contend that we can ask for public recognition as professionals while telling the public that the national defense interest is secondary to the interest of collectivized engineers through unions, that picket lines are a legitimate thing for professional people, that economic pressure of the strongest sort is to be resorted to when we don't have our way, that we can

conduct economic warfare through newspaper advertising? I have said before and maintain even more strongly now that engineers' unions will inevitably follow the tactics of trade unions, using all the same devices, whether they intend to do so or not at the beginning, and as they accept the trade union philosophy and strategy they will drag the engineering profession down to the level of a trade and nothing more.

I would like to refer to still another recent newspaper report, again on the East Coast. The gist of the situation was that a group of engineers, organized in a collective bargaining unit, had been on strike against their employer. The newspaper stories related some details of the dispute which mainly involved wages, and then told that the company had been engaged in secret work for the Armed Forces and the Atomic Energy Commission and that there had been no production on these national defense projects since the engineers had gone on strike. The public was told, through these newspaper stories, that representatives of the government had termed production losses "increasingly critical."

I don't know if the engineers who went on strike in that situation had a justifiable complaint, but again I do know that we cannot expect professional status and recognition from the public and from industry by harming the national defense of the nation. I know that we cannot go to the public during Engineers' Week, for instance, asking for their understanding and their support, telling them that we are professional men, and at the same time let them know that the same profession is going to obtain certain economic gains regardless of the public interest. Can we talk professionalism and strikes, dignity and picket lines, and recognition and boycott, in the same breath? Unionism may, and I repeat may, be one road to economic improvement, but it is a different road than professionalism and the two will never be a dual highway.

This problem is not confined to any one section of the country. It is a national problem and we are facing it as a National Society. Our State Societies must face it also and face it aggressively. At our Board Meeting in Indianapolis the Ohio Society reported to the Board an urgent and serious situation in which a trade union—the International Union of Operating Engineers—is attempting to force the professional engineers in the employ of contractors building portions of the Ohio Turnpike into that trade union. The Ohio Society is responding to this challenge and the N. S. P. E. Board directed that the National Society send an observer into the state to ascertain all the facts and further authorized N. S. P. E. intervention into the case if and when legal proceedings are brought as a "friend of the court" to help fight this current threat. If they get away with it in Ohio, Illinois may be next, or anywhere else. It is your fight and it is our fight and we must put our shoulders to it with all the vigor at our command if we are to survive and go forward as a profession.

With the technical and scientific acceleration that has taken place within the last decade, it is difficult for those

of us in the profession to realize the pinnacle upon which we have been placed by the public. The profession was not prepared to assume the tremendous responsibilities that were suddenly thrust upon it. Likewise the public was not possessed of an awareness of the profound influence the engineer has upon its everyday living. You may not realize it, but you are "Mr. Big" in this nation; in fact, throughout the world. Every decision in government and in private business hinges upon your analysis of the problem. If you say "no," the door stays closed. If you say "yes," the door opens and out tumbles the implementation program of your creative genius. Multiplied millions of dollars are expended with complete confidence in your affirmative answer. Like a well designed structure, this confidence has been built upon a solid foundation of individual professional integrity. This is the engineer's greatest asset. I urge you to hold it dear and never allow it to be undermined, even though, in unusual circumstances, you may temporarily be deprived of your means of livelihood. Without it, we become mere automatons and others, not so well equipped, will make the decisions, with the resultant mistakes that government and business will have to absorb.

One might well ask just how this professional integrity has been attained, and the same person could frame his own answer. For what it might be worth in your thinking, I shall submit my answer. It must first stem from one's own feeling of personal responsibility—a feeling that upon your decision, a vehicle will be created to preserve life and property, to facilitate the movement of traffic, to open new wealth in the expanded usefulness of natural resources—to improve the military strength of our nation—all these things and many more have been created and never a single one without careful consideration of the economic justification.

Another important trunk in this tree of professional integrity can be summed up in a newly coined phrase "Freedom of Association." Your National Society is now attempting to persuade Congress to broaden the scope of the Taft-Hartley Act to include this Freedom. And what does it mean? If this amendment were adopted, groups of professional engineers in an industry would be permitted complete freedom to exchange views on professional matters and employment conditions with higher levels of management and among themselves regardless of whether they are employed in a supervisory or non-supervisory capacity.

The wall—the barrier—which now separates professional engineers from each other because some technically are "employees" and others are in the category of "supervisor," would come tumbling down and they would be able to work together and advance together as members of one and the same profession.

This amendment is predicated on the basic principle that all professional engineers have in common the background, training, and outlook of one profession.

To me the most outstanding example of this restrictive influence is a number of similar cases in point that have been repeated to me. Industrial plants quite often are

so large that the personnel must be organized rather thoroughly in order to maintain a continuity of purpose to which the particular industry has dedicated itself.

This organizational chart permeates the engineering department as well as the others. The chart reflects supervisory as well as design personnel. Unions are quick to differentiate between the two. In any number of instances, the engineer in design is superior in training as well as income to the engineer in a supervisory capacity, and yet the former falls in the labor category and the latter in the management group. Here the designer is subjected to the union pressures, when he should have complete freedom of interchange with management in the further development of his creative ability.

While we are on the subject of the engineer in industry, I want to publicly express a personal viewpoint. All engineering phases of industry are a part of management. The engineer creates and designs the product, he designs the machinery to make it, and he instructs the public in the use of this same product. It is his brain, not his muscle, that is integrated into the complexities of a modern industrial plant.

When industrial organizations employ engineers on assignments of a sub-professional or clerical character, the end result is likely to be frustration, retarded professional development and at least the danger of opening the door to the acceptance of the collective approach inherent in unionism. In these times of high demand for engineering manpower, industry can ill afford to use these professional talents for other than truly professional work and certainly engineers are more closely affiliated with the management level than the great mass of production workers. If our legislators would recognize this fundamental viewpoint, and I sincerely believe it to be fundamental, then the problems of the engineering profession in labor legislation could be resolved overnight.

I believe I have summed up as briefly as possible the basic philosophy of your National Society of Professional Engineers. It is utterly impossible for a Professional Engineer to forge ahead intellectually and financially if you are in a union where the poor are as good as the best and seniority reigns supreme.

Having given you some brief information on the relationship between the professional engineer and the union, I would like to have it definitely understood that I personally am not against unions per se. They have their place. They are a part of our society, but I submit that an organization of professional engineers with all of the freedom of exchange that is permitted in such an organization is a better vehicle for the professional engineer than a union. Quite naturally, I am referring to the National Society of Professional Engineers.

In conclusion, I hope that my remarks have not discouraged you, but that they rather have strengthened your resolve to stay on the road of professionalism. Our way is clear and every day we are moving forward. We are meeting some large boulders of opposition and we

are often invited to stray into side roads which will lead to futility or despair. But as I have travelled this great country, talking with thousands of professional engineers, meeting with Chapter and State Societies, and being at great meetings of professional engineers, such as this one, I have become more convinced than ever that we will succeed, that engineering is a great profession and will become an ever greater profession in the future, and that these things are and will be because you—the professional engineers of today—sacrifice and work so that your professional life will be improved and the lot of your professional brothers of tomorrow will be richer and more rewarding.

FROM N. S. P. E. LEGISLATIVE BULLETIN

President Orders Study of Research Program

“Science has a vital role in our nation’s security and growth. During the past half-century, it has brought about a vast transformation in industry, in agriculture, in medicine, in transportation, and in communications. Military science has been revolutionized by technological development. The impact of science is increasingly felt in every field of public policy including foreign affairs. All that has been brought about through a combination of vision, initiative, business enterprise, a strong educational system, and the dedicated enthusiasm of the scientific community.”

Thus, President Eisenhower stated in ordering the National Science Foundation to survey the Government’s research and development program, now costing more than \$2 billion per year. In 1940, the President pointed out, the total federal appropriation for the same purpose was \$100 million. The objectives of the new study are to speed the attainment of federal research goals, stimulate basic research, achieve whatever economies are possible, and safeguard the strength and independence of educational institutions.

Terming present-day research as big business, the President stated that the present large expenditures would require the services of the finest scientific brains in the country for supervision and coordination of the many research programs. He also emphasized that more than half of all the investment in the nation today for scientific research and development is being made by the federal government. “In large measure these federal funds are paid to industry and educational institutions for the conduct of research and development projects. Thus our federal policies and practices regarding research and development are felt immediately and substantially by industry and our educational institutions.” The President added that more than 90 per cent of federal support is going into applied research and development, and that “. . . this nation must extend its support of research in basic science.”

Social Security and the Professionally Self-Employed

The House Ways and Means Committee has concluded its hearings on the proposals to expand social security

benefits and coverage. Of immediate concern to self-employed professional engineers is whether the committee will follow the President's recommendations to establish mandatory coverage for the now-excluded self-employed professionals. To do so, the committee will have to reject the recommendations of all the major professional societies, including engineering, medicine and law.

N. S. P. E. told the committee that after extensive study and a poll on the subject, most of the self-employed members who would be directly affected have expressed objection to mandatory coverage. Voluntary coverage for those desiring it was recommended. The major objection to mandatory coverage occurs, the committee was told, because most self-employed professional engineers feel they will not be eligible for monthly benefits after paying into the fund because they will continue their practice after the age of 65 and earn more than the \$1,000 per year to be permitted under the Eisenhower proposal, if adopted. The present limit on earnings without loss of benefits is \$900 per year.

Case histories were cited where self-employed consulting engineers past the age of 65 were drawing retirement benefits based on past employee service. They would lose their current benefits if now covered in addition to being required to pay into the social security fund. N. S. P. E. pointed out that in considering the application of the law to self-employed P. E.'s, it should be borne in mind that contrary to some of the other professions the pattern in engineering is that the great majority are employees and those who enter self-employment consulting practice generally do so after a considerable period of time as an employee covered by social security. The change in the law as proposed by the President would induce many of the older and more experienced self-employed P. E.'s to leave the field, it was stated.

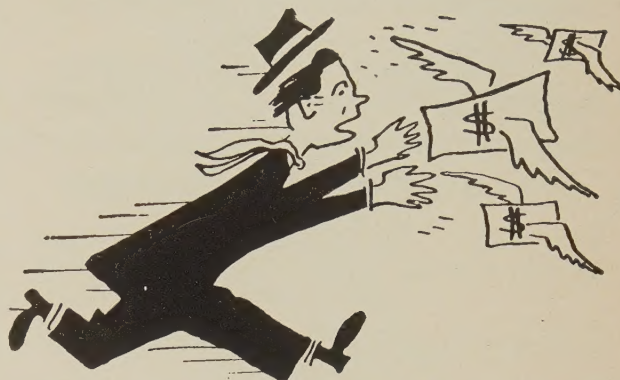
"If the committee feels that it cannot recommend such a system (voluntary coverage) then it would be the position of our organization (N. S. P. E.) that the law should be left as it is insofar as the self-employed professional engineers are concerned; that is, they should be excluded completely from coverage."

N. S. P. E. testimony approved the coverage of state and local employees now under retirement systems based on a referendum procedure requiring a two-thirds affirmative vote of the affected group.

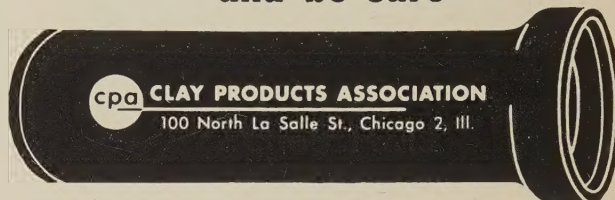
Outlook on Taft-Hartley

Despite the generally accepted opinion that there will not be any amendments to the Taft-Hartley law this year, the two labor committees of the Congress are doggedly pressing forward with their studies. The Senate committee has completed its preliminary work and has reported a 12-point revision bill which generally follows the President's recommendations. The House committee has followed a point-by-point analysis pattern, adopting numerous suggested amendments which go much further than the President suggested and quite a distance beyond the Senate committee action. The wide variation between

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the attitudes of the two committees has led many observers to conclude that even if the respective houses should adopt their own committee recommendations in general, a conference committee could not reconcile the two bills. Some reports have it that the labor union leaders are so convinced that any amendments this year would be "anti-labor" to such an extent, particularly because of the House committee views, that they are secretly lending their weight to any and all amendments which will arouse the strongest opposition of pro-labor congressmen.

As this report is written, the House committee has not acted on the Kearns "Freedom of Association" bill sponsored by N. S. P. E. However, the bill to permit all professional employees to associate in non-bargaining organizations is stated to be definitely on the House committee agenda and will come to a vote before the drafting sessions conclude.

The tentative schedule for floor consideration calls for the Senate to start debate during the week of April 26th and the House to tackle the legislation sometime in May.

Point Four Developments

The program of technical assistance to foreign nations is scheduled for an extensive review under the terms of a resolution approved by the Senate Foreign Relations Committee. The committee pointed out that the program is now four years old and that there have been a number of significant developments and controversial questions in connection with it. The investigation, to be

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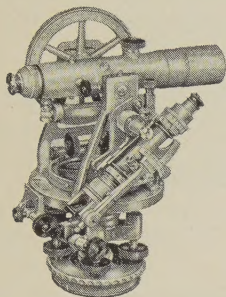
conducted by a sub-committee of 4 Republicans and 4 Democrats, is to investigate all aspects of the program including direct U. S. activities, relationship to the technical assistance program of the United Nations, the program conducted by the Organization of American States, the extent to which the program has been able to utilize private agencies in achieving its purposes, and the relationship between technical assistance, economic aid, and military assistance. (S. Res. 214.)

Learn to laugh: a good laugh is better than medicine. Attend to your own business; few people can do that well. Say kind things; nobody ever resents them. Avoid hasty remarks; they cause much of the world's trouble. Stop grumbling; see some good in the world and keep the bad to yourself. Hide aches with a smile; nobody is much interested anyway. Learn to laugh; it pays!

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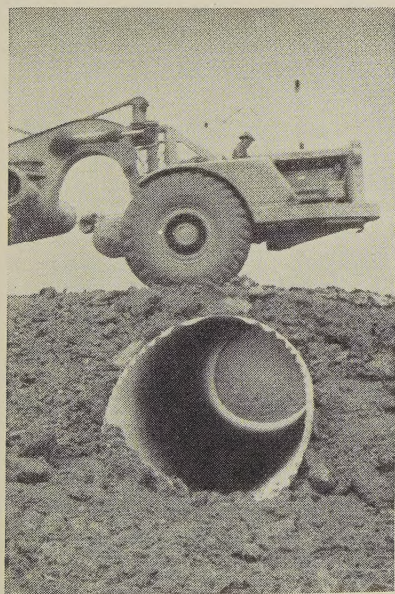
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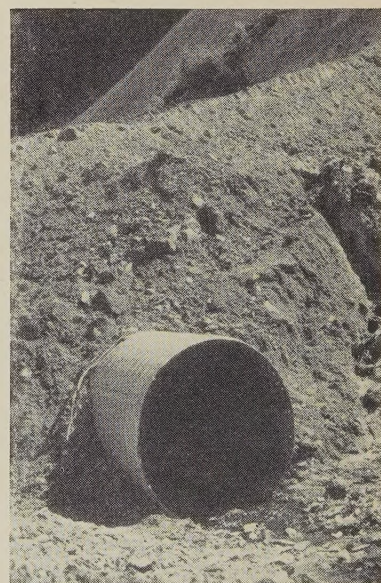
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Plant Engineer, age: 35-45. 5 plus yrs. exp. in administrative type of engineering and preferably in paper mills. Knowledge of hydraulics helpful. Duties: handle maintenance power and enrg. problems for a pulp, paper and converting mill. For a paper manufacturer. Salary: \$10,000 to \$12,000. Employer will negotiate fee. Location: Alabama. C-1842

Research and Development, M.E. or Physics preferred. 3 plus yrs. exp. in small mechanisms and especially timers and fuses. Knowledge of horology. Duties: research and development, design and testing of timers and fuses. For a manufacturer of clocks. Salary: \$55 to \$9,500 per yr. dep. on exp. Employer will negotiate fee. Location: Ohio. C-1840

Field Electronic Engr., E.E. or Physics or Electronics, age: 30-45. 5 plus yrs. exp. in commercial electronic exp. in application work. Knowledge of electronic equipment. Duties: field application, service and engineering of electronic equipment of audio or communications nature. For a manufacturer of elec. equip. Sal.: Up to \$650 per month dep. on exp. Travel: 30-40% of time. Location: Wide open. C-1821

District Engineers (2), C.E. or Arch., age: to 45. 5 plus yrs. exp. in theory and des. of structural steel with fabricator, consultant or teaching. Some sales promotional and trade assoc. exp. Should be combination of

enrg. qualified to design materials of const. with structural steel a must, sales and public relations man; must have good personality and able to present his subject well. For trade association. Sal.: \$7,500 plus office and travel exp. Location: 1-Detroit; 1-Chicago. C-1819

Sales Engr.-Refractories, age: 25-40. 2 plus yrs. exp. in selling refractories or foundry supplies. Know: foundry work and preferably in ferrous field helpful. Duties: selling a line of refractories to industrial. Sal.: \$350-400 mo. no exp. Location: Wis. Up to \$700 mo. with exp. Empl. will neg. fee. Some travel and car required. C-1818

Sales Eng., Grad. Elect., age: to 40. 5 yrs. exp. in utility work preferably in sales dept. Know: Commercial lighting. Duties: contacting industrial plants, selling & application work on commercial lighting. Sal.: \$6,000 to \$8,000. Location: Oregon. C-1816(a)

Sales Engr., Grad. Elect., age: to 40. 5 plus yrs. exp. in utility work—some of which has been in sales. Know: power and powerloads. Duties: selling all types of power—to industrials. Must have utility exp. & meet people well. Sal.: \$6,000-\$8,000. Location: Oregon. C-1816(b)

Staff Engr., Grad. I.E. or M.E. 5 yrs. exp. on staff of industrial enrg. firm. Know: Metal mfg. & foundries. Duties: must be good organizer to install cost accounting and gen'l controls systems. Present assignment at least 1 yr., 150 miles SW of Chgo., thereafter elsewhere. For a Consulting Firm. Sal.: to \$650 plus 8 per diem expenses. Hdqrs. Chgo. Employer will neg. fee. C-1815(c)

Shop Supt. 5 plus yrs. exp. in industrial refrigeration production. Know: of neon, welding & custom built job shop type production. Duties: supervising the manufacture of custom built industrial refrigeration units, ice rinks, and other special built equip. of a similar nature. For a mfr. of Ind. refig. Sal.: Up to \$15,000. Location: Chicago. Employer will neg. fee. C-1813

Forest Products Engr., fully familiar with all phases of sawmill (hardwood) & wood waste utilization processes, especially preservation with creosote, prod. of wall boards & if possible destructive distillation of wood. Duties: Study site, plans, layout, etc., for sawmill center & make recommendations for improvements and areas for further product development. Temp. 2 mos. Sal. Up to \$1,000 mo. Loc.: Chile. 25% overseas allowance. Dep. on exp. C-1790(a)